

2. *Boulders Carried by Ice*, (Perley's Report on the Fisheries of New Brunswick, p. 26).—Off the western part of Shippagan Island, within the Bay of Chaleur, there is an extensive shallow flat, extending nearly two miles from the land, called the *Grand Batture*. On this flat, there are numerous large blocks or boulders firmly imbedded, which render it dangerous to cross, even with a fishing boat; the wreck of a fishing boat was noticed upon it when the writer crossed in his canoe. These boulders are brought over from the wild and mountainous shores of Caspe, directly across the bay, by the huge masses of floating ice, driven over by the northerly gales which ground upon the *Grand Batture*, and there melting, add the rocks they bring, to those already deposited. With reference to this moving of rocks by ice, Mr. Wilson mentioned that there was formerly a very large rock directly in front of his landing place, at Miscow, which was much in the way of his boats, and against which, in stormy weather, they had often received damage. But the severe winter of 1848-49, caused the ice to attain an unusual strength and thickness near the shore of Miscow: and when it moved off in the spring, it carried off this large rock to deposit it where, he hoped, it would be less troublesome.

### III. ZOOLOGY.

1. *On the Classification of the Maioid Crustacea or Oxyrhyncha*; by JAMES D. DANA.—The MAIOIDEA are usually divided into three tribes, characterized by the relative lengths of the legs, viz., the *Macropodinea*, the *Mainea*, and the *Parthenopinea*. A character of the kind here alluded to is of little importance as a distinction in classification, unless it is indicative of other more fundamental differences. The third of these subdivisions seems to be properly and distinctively a natural group. But the first two are essentially identical in all points, excepting the greater or less elongation of the eight posterior legs. The mouth, the antennæ, eyes, branchiæ, and other parts, afford no ground for separating them: moreover, the transitions are gradual and numerous. *Libinia* and *Doclea* pass into one another through *Libidoclea*, and these three genera are more closely related than *Doclea* and *Inachus*. *Eurypodius* contains a species with short legs; and the genus *Oregonia*, very near *Eurypodius*, has no longer legs than some of the admitted *Mainea*. The mere length of the legs, if regarded, thus breaks up true natural groups.

De Haan sustains the separation of the *Inachidæ* (Edward's *Macropodinea*, *Doclea* and *Latreillia* being excluded,) on other grounds, acknowledging the unimportance of the characteristic derived from the legs. As in other departments of Crustacea, he basis his distinctions mainly on the maxillæ or maxillipeds. Thus his *Maia*, *Pisa* and *Doclea* groups include species having the fourth joint of the outer maxillipeds articulated with the inner apex of the third joint; while in his *Inachus* group, the articulation is with the summit of the third joint. This distinction would separate the intimately related genera *Eurypodius* and *Oregonia*, as this joint in the latter has the ordinary *Maia* form. On examining *Eurypodius* it is found that the peculiarity of the third joint referred to arises simply from its being lengthened or extended along the inner

side, so that the true apical margin slopes backward and outward. The fourth joint is articulated with the same part normally in both, and the only difference is in the greater or less inclination of the summit margin, when greatest it approximating to longitudinal. The little importance of the distinction based upon the maxillipeds among the Cancroidea as well as Maiioidea is shown by numerous instances. Even the single genus *Xantho* presents wide variations, as the joint may be either transverse or oblong. (Compare *Xantho Orbignii*, *Edw.* with other species.) The system of De Haan for this reason, although developing some new relations, contains many ambiguities and incongruous associations, notwithstanding the learning of its author, the remarkable skill and accuracy of his work, and the vast additions of facts he has made to the science. We have admired the wonderful fidelity of his plates, the thorough spirit of investigation displayed through his magnificent volume, and the judgment with which he has seized upon typical forms in instituting his genera. Yet we can not but object to his defective system of arrangement and description, by which his types are often thrown into wrong associations, and the groups they typify are laid down with false limits,—the characters to be derived, (as the system of Milne Edwards illustrates,) from organs of real importance in the species, being sacrificed in a great degree to indications from the maxillæ or maxillipeds.

In the distribution of the Maiioidea, we disregard, for the reasons stated, the older subdivisions of Macropodinea and Maiinea, and arrange their species into families and subfamilies as below, according to the characters of the eyes, antennæ and other organs, using these characters, in the order, as far as we can judge, of their relative bearing upon the functions or habits of the species.

De Haan has separated on good grounds *Latreillia* from the other genera, having shown that the posterior legs are short, dorsal, and more or less prehensile, as in *Dromia*, and that the vulvæ have the same position as in that genus (in the base of the feet of the third pair); and he therefore places the genus in the *Dromia* group. Still, in the number of branchiæ and some other characters, it is like the *Maiinea*, and it is properly an intermediate type. The outer antennæ are peculiar in being free and cylindrical from the very base, with the second joint much longer than the first, nearly as in the *Dromiacea*. These last facts with regard to the antennæ are also true of another genus having the posterior legs prehensile, somewhat *Dromia*-like, although they are not at all dorsal and also resemble the preceding legs. The genus referred to is *Oncinopus* of De Haan. It is apparently intermediate in character between the *Maia* tribe and *Latreillia*.

The aberrant form, *Oncinopus*, (and also *Latreillia*, if it be not thrown with the *Dromiacea*,) will naturally belong to a distinct group, and we therefore divide the Maioid Crustacea into three tribes, MAIINEA, ONCININEA and PARTHENOPINEA.

The Parthenopinea have the basal joint of the outer antennæ usually filling a hiatus in the orbit, as in most Cancroidea, and not projecting beyond the eyes, besides being more inward and posterior in position, and free or bounded laterally by sutures; while in the *Maiinea* this joint lies directly below the eye, projects beyond it, and is commonly soldered to the shell outside of the joint. The Parthenopinea are thus intermediate

between the Maiinea and the Cancroid Crustacea, resembling the latter also in their short epistome. The greater length of the anterior legs is not a necessary characteristic. They are also intermediate between the Maiinea and Dromioid species. The genus *Trichia*, of which De Haan makes one of his grand divisions of the Brachyura, is most nearly related to the Parthenopinea—the orbits, and antennæ, epistome and general form of the body resembling the same in Parthenope. But in its maxillipeds it approaches *Dromia*, as shown by De Haan.

*Telmessus* of White appears to belong with the *Corystoidea*, as the outer antennæ, in connection with the form, indicate.

The following are the Families, Subfamilies and Genera of MAINEA with their characteristics :

### FAM. I. MAIIDÆ.

OCULI RETRACTILES, IN ORBITIS SESE LATENTES.

I. DIGITI ACUMINATI.

A. Carapax oblongus.

α. OCULI PLUS MINUSVE TRANSVERSIM PORRECTI.

α ANTENNÆ EXTERNÆ APERTÆ.

\* *Rostrum sive elongatum sive breve, porrectum, non tumidum.*

† Pedes 8 postici prælongi.

1. INACHINÆ.—Carapax triangulato-ovatus. Rostrum emarginatum aut integrum.

G. 1. *INACHUS*, *Fabricius*.—Carapax gibbosus, spinâ præorbitali sive parvulâ sive nullâ, rostro brevi. Pedes 8 postici filiformes, 2dis 3-4-plo longioribus quam carapax post-rostralis.

G. 2. *EGERIA*, *Latreille*.—Carapax gibbosus, orbiculato-ovatus, rostro sat brevi, paulo reflexo. Pedes 8 postici filiformes longissimi (iis *Inachi* duplo longiores).

G. 3. *MICRORHYNCHUS*, *Bell.*\*—Carapax gibbosus, latitudine trans-orbitali parvâ, dente præorbitali nullo, post-orbitali parvulo. Rostrum parvulum, integrum. Pedes 8 postici corpore fere duplo longiores.

2. MACROCHEIRINÆ.—Carapax latè ovatus. Rostrum furcatum. Pedes prælongi. Articulus antennarum externarum Imus solutus.

G. *MACROCHEIRA*, *De Haan*.†—Carapax gibbosus, orbiculato-ovatus, spinâ præorbitali parvulâ, rostro saliente, cornubus valde divaricatis. Pedes toti validi longi.

†† Pedes 8 postici longitudine mediocres.

† *Pars antennarum externarum mobilis margine orbitæ orta.*

3. MAIINÆ.—Carapax orbiculato-ovatus, rostro prominente, profundè bifido.

\* Zool. Trans., ii, 40.

† Crust. Fauna Japonica, 88.

G. MAIA, *Lamarck*.—Articulus antennarum ext. Imus spinis duabus longis apicem externum armatus. Spina inter-antennalis elongata, acuta. Tarsus infra non spinulosus.

‡‡ *Pars antennarum externarum mobilis orbitâ omnino exclusa.*

4. PISINÆ.—Carapax triangulato-ovatus, rostro bifido.

1. Pedes 8 postici non valde compressi; articulus 5tus processu infra non armatus.

G. 1. PARAMITHRAX, *Edwards*.—Carapax gibbosus, rostro elongato. Oculi graciles. Articulus antennarum externarum Imus spinis duabus longis apicem externum armatus (eoque *Maia* affinis).

G. 2. PISA, *Leach*.—Carapax elongatè pyriformis, gibbosus, spinâ præorbitali saliente, rostro longo, vix depresso. Articulus antennarum ext. Imus angustus. Pedes 2di 3tiis valde longiores.

G. 3. PELIA, *Bell*.\*—Carapax elongatè pyriformis, gibbosus, spinis præorbitali et post-orbitali carens, rostro longo, vix depresso. Articulus antennarum ext. Imus angustus. Pedes 1mi 2dis breviores.

G. 4. LISSA, *Leach*.—*Pisæ* affinis. Carapax pyriformis, rostro longiusculo, cornubus laminatis, truncatis, dente præorbitali saliente.

G. 5. RHODIA, *Bell*.†—Carapax pyriformis, paulo depressus, spinâ præorbitali saliente, rostro brevi, acuto. Articulus antennarum externarum Imus angustus, apicem acutè productus extus uni-dentatus. Pedes 1mi 2dis breviores.

G. 6. HYAS, *Leach*.—Carapax ovatus, sæpe lyratus, depressus, spinâ præorbitali carens, rostro longiusculo, acuto, depresso. Articulus antennarum ext. Imus angustus, 2dus depressus, tarsus infra non spinulosus.

G. 7. PISOIDES, *Edw. et Lucas*.‡—*Hyadi* affinis. Carapax latè ovatus, spinâ præorbitali carens, postorbitali parvâ, rostro longiusculo, acuto. Articulus antennarum ext. Imus latissimus, 2dus depressus, densè ciliatus.

G. 8. HERBSTIA, *Edwards*.—Carapax orbiculato-ovatus, depressus, spinâ parvâ præorbitali instructus, rostro brevi, cornubus paulo depressis acutis. Articulus antennarum ext. Imus angustus, apicem acutè productus, extus uni-dentatus. Pedes 1mi 2dis longiores.

2. Pedes 8 postici late compressi.

G. 10. THOE, *Bell*.§—Carapax late ovatus, rostro parvulo, bifido, dente præorbitali saliente. Oculi breves. Articulus antennarum ext. Imus latissimus. Pedes 1mi *maris* 2dis longiores.

3. Articulus pedum posteriorum 5tus processu infra armatus.

G. 11. DEHAANIUS, *M'Leay*.||—*Hyadi* paulo affinis. Carapax latus, spinâ præorbitali saliente, rostro sat brevi. *Leucippæ* affinis, si oculi non retractiles.

\* Zool. Trans., ii, 35.

† Zool. Trans., ii, 43.

‡ Crust. D'Orbigny's South America 10, pl. 5. The species *P. tuberculosus* appears to be the *Hyas Edwardsii* of Bell, Zool. Trans. ii, 49.

§ Zool. Trans. ii, 47.

|| M'Leay, Smith's Illust. Zool. S. Africa.

\*\* *Rostrum saliens, porrectum, tumidum, apice emarginatum.*

5. LIBININÆ.—Carapax latè pyriformis, tumidus, lateribus altis. Oculi perbreves. Pedes sive mediocres sive prælongi.

G. 1. LIBINIA, *Leach*.—Pedes mediocres. Carapax dente præorbitali parvulo instructus. Abdomen *maris feminaeque* 7-articulatum. Articulus antennarum ext. Imus latiusculus, extus non denterigerus.

G. 2. LIBIDOCLEA, *Edw. et Lucas*.\*—Pedes longi. Carapax spinis plus minusve armatus, dente præorbitali parvo. Articulus antennarum ext. Imus angustus, apicem acutè productus, extus denterigerus.

G. 3. DOCLEA, *Leach*.—Pedes prælongi. Carapax spinis plus minusve armatus, dente præorbitali carens. Articulus antennarum ext. Imus angustus, abdomen *maris* 7-articulatum, *feminae* 5–7-articulatum.

\*\*\* *Rostrum breve, latissimum, bilobatum, porrectum.*

6. PRIONORHYNCHINÆ.—Carapax ovatus, gibbosus. Oculi breves, Fossæ antennales marginem frontalem fere attingentes.

G. PRIONORHYNCHUS, *Hombroun et Jacquinet*.†

\*\*\*\* *Rostrum latum, valde deflexum.*

7. MICIPPINÆ.—

G. MICIPPA, *Leach*.—Oculi longiusculi. Carapax anticè parce angustior, rostro laminato.

β ANTENNÆ EXTERNÆ SUB ROSTRO CELATÆ.

8. CHORININÆ.—Carapax triangulato-ovatus. Rostrum furcatum. Pedes 8 postici vix compressi.

G. 1. CHORINUS, *Leach*.—Carapax gibbosus, spinis plus minusve armatus, rostro longo, cornubus acuminatis, spinâ præorbitali saliente. Margo orbitalis inferior largè interruptus. Articulus antennarum ext. Imus angustus. Pedes 2di 3tiis valde longiores.

G. 2. CHORILIA, *Dana*.‡—Carapax formâ rostroque *Chorino* affinis. Orbita infra latè interrupta, supra fissa, spinâ præorbitali acutâ. Articulus antennæ externæ Imus angustus, apice externo acutè productus. Pedes 1mi 2dis breviores, 8 postici similes, 2di 3tiis non multo longiores.

G. 3. LAHAINA, *Dana*.§—Carapax formâ rostroque *Chorino* plerumque affinis. Cornua rostri gracillima valde divaricata. Articulus antennæ externæ Imus latus, parce longior quam latior, apice cum processu spiniformi armato. Orbita infra supraque sinu rotundato interrupta, dente præorbitali acuto. Pedes toti graciles.

G. 4. NAXIA, *Edwards*.—Carapax gibbosus, rostro mediocri, cornubus subcylindricis, truncatis, dente præorbitali brevi. Margo orbitalis inferior fissus, non late interruptus. Articulus antennarum ext. Imus latus, apicem angustus.

\* Crust. D'Orbigny's South America, 6, pl. 3.

† Voy. Astrolabe et Zélée au pôle Sud, pl. 1. f. 1.

§ This volume, p. 269.

‡ This volume, p. 269.

G. 5. SCYRA, *Dana*.\*—Carapax gibbosus, rostro mediocri, laminato, cornubus acutis, dente præorbitali acuto. Margo orbitalis superior paulo unifissus. Articulus antennarum ext. Imus omnino angustus, 2dus depressus.

G. 6. HYASTENUS, *White*.†—*Chorino* affinis. Rostrum prælongum, cornubus non depressis, ante poneque oculos directus. Margo orbitalis superior unifissus. Pedes 2di longiores.

9. PYRINÆ.—Carapax subpyriformis. Pedes 8 postici valde compressi.

G. 1. PYRIA, *Dana*.—Carapax depressus, inermis, rostro lamellato, cornubus ovatis. Oculi perbreves, orbitâ spinis non armatâ.

b. OCULI LONGITUDINALITER PORRECTI, CARAPACE ANTICE TRUNCATO.

10. OTHONINÆ.—Carapax antice late truncatus, rostro fere obsoleto. Oculi elongati, cylindrici.

G. OTHONIA, *Bell*.‡—Carapax parce oblongus, suborbicularis, rostro bifido. Antennæ internæ minutissimæ; externæ latæ, articulo 1mo lato, 2do valde depresso, inverso-subtriangulato.

B. Carapax paulo transversus.

81. SALACINÆ.—Carapax fere orbicularis. Pedes 8 postici crassi, longi, articulo penultimo infra recto. Rostrum fere obsoletum integrum.

G. SALACIA, *Edwards et Lucas*.§—Carapax gibbosus. Fossa antennalis sub rostro partim excavata. Articulus maxillipedis externi 3tius medio apice emarginatus, hocque emarginatione articulum proximum gerens. *Inacho Grapsoque* affinis.

2. DIGITI APICE OBTUSI, INSTAR COCHLEARIS EXCAVATI.

12. MITHRACINÆ.—Oculi mediocres. Carapax sive paulo oblongus, sive transversus.

G. 1. MITHRAX, *Leach*.||—Carapax sæpe orbiculato-ovatus, interdum transversus. Rostrum aut saliens aut fere obsoletum, bifidum. Articulus antennarum ext. Imus apicem externum duabus spinis longis armatus.

\* This volume, p. 269.

† Ann. Mag. Nat. Hist. [2], xx, 61, and Crust. Voy. of Samarang, p. 11. The species is Seba's fig. 12, pl. 18 of the Thesaurus.

‡ Zool. Trans., ii, 55.

§ Crust. in D'Orbigny's S. Amer., 12, pl. 11.

|| The characters given by White for his genus *Schizophrys* (Ann. Mag. N. H. [2], ii, 282, 283, and Voy. Samarang, Crust., p. 16) do not serve to exclude the species from Paramithrax, Maia or Mithrax. The peculiarity of the orbit described and of the 1st joint of the outer antennæ, as far as understood by the writer from the description, are the same as in the genera just mentioned.

The genus *Dione* of De Haan (Fauna Japon. Crust. p. 82,) differs from Mithrax only in not having the interior apex of the third joint of the outer maxillipeds project inward a little over the insertion of the fourth joint. It corresponds to "*Mithrax triangulaires*" of Edwards.

G. 2. MITHRACULUS, *White*.—Carapax transversus. Articulus antennarum ext. Imus duabus spinis longis non armatus.

13. CYCLACINÆ.—Oculi longi.

G. CYCLAX, *Dana*.\*—Carapax paulo oblongus, orbiculato-ellipticus, rostro sat brevi, bifido, acuto. Pedes 8 postici longi.

FAM. II. TYCHIDÆ.

OCULI RETRACTILES, SUB CARAPACE LATENTES, ORBITIS CARENTES.

1. CRIOCARCININÆ.—Rostrum valde deflexum. Carapax oblongus.

G. CRIOCARCINUS, *Guerin*.—Oculi prælongi, orbitæ margo superior processu longo lamellato apicem armato instructus.

2. TYCHINÆ.—Carapax oblongus, anticè latus, latitudine trans-orbitali grandi, rostro non deflexo, sat longo, furcato. Oculi apice paululum exserti.

G. TYCHE, *Bell*.\*—Carapax depressus, anticè cornubus rostri spinisque duabus præorbitalibus totis parallelis et subæquis confectus, spinâ post-orbitali nullâ. Articulus antennarum ext. Imus oblongus, inermis.

3. CAMPOSCINÆ.—Carapax oblongus, rostro fere obsoleto, emarginato. Pedes 8 postici longi. Oculi longè pedunculati et exserti.

G. CAMPOSCIA, *Latreille*.—Carapax subpyriformis, non armatus. Pedes 8 postici subcylindrici, 2di 3tiis breviores.†

FAM. III. EURYPODIDÆ.

OCULI RETRACTILES, NON SESE LATENTES.

1. *Antennæ externæ apertæ.*

1. EURYPODINÆ.—Carapax triangulato-ovatus, rostro longo, furcato. Pedes longi, 4 postici non bene prehensiles. Oculi longi et longe salientes. Spina post-orbitalis oblonga.

G. EURYPODIUS, *Guerin*.—Pedes 8 postici longi, articulo penultimo valde compresso, ensiformi.

G. OREGONIA, *Dana*.‡—Pedes 8 postici sat longi, articulo penultimo subcylindrico.

2. *Antennæ externæ sub rostro celatæ.*

AMATHINÆ.—[An oculi retractiles, iis *Eurypodii* similes, eoque genus hac sede?] Carapax triangulato-ovatus, rostro furcato, latitudine trans-orbitali perangustâ. Pedes longi.

G. AMATHIA, *Roux*.—Carapax gibbosus, valde armatus, rostro prælongo, cornubus divaricatis. Pedes filiformes, prælongi. Oculi parvi. Articulus antennarum ext. Imus perangustus. Epistoma fere quadratum.

\* This vol., p. 269.

† Zool. Trans. ii, 57.

‡ This vol., p. 270.

## FAM. IV. LEPTOPODIDÆ.

OCULI NON RETRACTILES, SESE NON LATENTES. PEDES PRÆLONGI.

A. *Antennæ externæ apertæ.*

1. ACHÆINÆ.—Carapax triangulato-ovatus, rostro perbrevis, bifido. Oculi longi, longèque salientes. Pedes 4 postici subprehensiles.

G. 1. ACHÆUS, *Leach.*—Carapax gibbosus. Pedes 8 postici filiformes, longi, tarso pedum 4 posteriorum falciformi, articulis penultimis subcylindricis.

2. INACHOIDINÆ.—Carapax triangulato-ovatus, rostro elongato, simplice.

G. INACHOIDES, *Edw. et Lucas.\**—Carapax valde gibbosus, rostro longiusculo, acuto, spinâ postorbitali parvâ. Pedes 8 postici sat longi, gracillimi. Articulus antennarum ext. Imus angustus.

B. *Antennæ externæ celatæ.*

3. LEPTOPODINÆ.—Carapax triangulato-ovatus, rostro elongato, simplice. Pedes longissimi.

G. LEPTOPODIA, *Leach.*—Oculi sat salientes. Pedes toti gracillimi.

4. STENORHYNCHINÆ.—Carapax triangulato-ovatus, rostro breve, bifido.

G. STENORHYNCHUS, *Lamarck.*—Oculi sat salientes. Pedes antici crassiusculi.

## FAM. V. PERICERIDÆ.

OCULI NON RETRACTILES, SESE NON LATENTES. PEDES LONGITUDINE MEDIOCRES.

A. *Antennæ externæ apertæ.*

1. PARAMICIPPINÆ.—Rostrum valde deflexum. *Micippæ* aspectu similes.

G. PARAMICIPPA.—Rostrum latum, articulus antennarum ext. 2dus breviter cordiformis. Epistoma perbreve.

2. PERICERINÆ.—Rostrum profundè bifidum, non deflexum.

G. 1. PERICERA, *Latreille.*—Carapax sæpe triangulatus, interdum orbiculato-ovatus, paucis spinis sæpius armatus, rostro divaricatè furcato. Articulus antennarum ext. Imus apice latus et spinâ armatus. Orbita tubulata, oculum strictè includens, margine superiore subtiliter unifisso.

G. 2. TIARINIA, *Dana.†*—Carapax subpyriformis, tuberculis plerumque pustuliformibus sæpeque aggregatis ornatus, rostri cornubus gracilibus contiguis. Articulus antennarum ext. Imus apicem latus et inermis, angulo externo interdum saliente tantum.

\* Crust. in D'Orbigny's S. Amer., 4, pl. 4.

† This volume, p. 271.



G. 3. *PERINIA*, Dana.\*—Carapax orbiculato-ovatus, tuberculis paucis non acutis ornatus, rostri cornubus brevibus, discretis. Articulus antennarum ext. Imus oblongus, apicem non latior, angulo externo valde producto. Orbita anticè aperta, margine superiore non unifisso.

G. 4. *HALIMUS*, Latreille.—Carapax triangulato-ovatus, cornubus rostri grandibus, divaricatis. Articulus antennarum ext. Imus angustus. Articulus pedum 8 posticorum 5tus valde compressus, processu infra non armatus.

G. 5. *PUGETTIA*, Dana.†—Carapax triangulato-ovatus. Rostro antennisque ext. *Halimo* affinis. Articulus pedum 8 posticorum 5tus cylindricus.

3. *MENÆTHINÆ*.—Rostrum integrum aut subintegrum.

G. 1. *MENÆTHIUS*, Edwards.—Carapax triangulato-ovatus, depressus, regione antero-laterali plicis tribus plus minusve ornata. Pedes 8 postici cylindrici. ‡

G. 2. *ACANTHONYX*, Latr.—Carapax depressus, non tuberculatus, sive subtriangulatus sive subquadratus (dente post-orbitali dilatato), regionibus non conspicuis, dente præorbitali parvulo, rostro crasso, apice emarginato. Pedes 8 postici mediocres, articulo penultimo compresso, infra dilatato et sæpe dentigero.

G. 3. *ANTILIBINIA*, M'Leay.§—Carapax valde convexus, regionibus non conspicuis, latitudine transorbitali minore (lat. max. 3plo latiore), rostro crasso, apice emarginato. Articulus pedum 8 posticorum penultimus infra non dilatatus nec dentigerus.

G. 4. *PELTINIA*, Dana.||—Carapax depressus vix tuberculatus, dente præorbitali breviter instructus, latitudine transorbitali majore (lat. max. 2plo latiore), rostro lato, profundè bifido, sat brevi. Articulus pedum 8 posticorum penultimus infra non dilatatus nec dentigerus.

*B. Antennæ externæ sub rostro celatæ.*

1. Oculi prælongi.

4. *STENOCIONOPINÆ*.—Rostrum longum, furcatum, cornubus styli-formibus, divaricatis.

G. *STENOCIONOPS*, Latreille.—Carapax subpyriformis, gibbosus, spinâ præorbitali longissimâ. Articulus antennarum ext. oblongus.

2. Oculi aut longitudine mediocres aut perbreves.

5. *EPIALTINÆ*.—Rostrum oblongum, crassum, sive integrum sive emarginatum. Antennæ ext. apicem rostri sæpius non attingentes. Pedes 8 postici subcylindrici.

\* This volume, p. 271.

† The genus *Xiphus* of Eydoux and Souleyet, as figured in the plates of the Voyage of the Bonite, has the beak, præorbital spine or tooth, outer antennæ, and general form of *Menæthius*. But the eyes may be longer pedunculate, and as there is no description, it is not apparent whether they are retractile or not. The species is called *Xiphus margaritiferus*. The beak is pointed, and the 3d basal joint of the outer antennæ reaches to apex of beak.

§ Smith's Illust. S. Af. Zool

|| This volume, p. 272.

G. 1. *EPIALTUS*, *Edw.*—Carapax inermis, vix tuberculatus, regionibus non conspicuis. Octo pedes postici nudi aut subnudi, articulo penultimo infra sæpe subdentigero.

G. 2. *HUENIA*, *De Haan.\**—Carapax 2-4 tuberculis acutiusculis sæpius armatus, interdum inermis, regionibus inconspicuis, rostro simplice, angulo carapacis postero-laterali prominente. Articulus pedum 8 posticorum penultimus plerumque infra dilatatus, dentigerus.

G. 3. *XENOCARCINUS*, *White.†*—Carapax tuberculis subacutis sparsim armatus, rostro simplice, truncato, margine postero-laterali non angulato, otundato.

G. 4. *LEUCIPPA*, *Edw.*—Carapax subtriangulatus fere inermis, regionibus non conspicuis, spinâ præorbitali nullâ. Pedes supra carinati, articulo penultimo infra non producto. Dens post-orbitalis prope oculum insitus, oculum vero non celante.

Genus *ZEBRIDA*, *White,‡* incertæ sedis; antennis externis obitâque *Eumedono* similis, eoque Parthenopineis congruit.—Carapax depressus, non armatus antice latior, dente post-orbitali portentose expanso, rostro latissimo, lamellato, profundè furcato. Oculi paululum salientes. Pedes compressi, angulati. Articulus antenarum externarum 1-mus *hiatum orbitæ occupans*, antice non productus.

2. *The Apteryx of New Zealand.*—With the skin of the *Notornis Mantelli* described in the January number of this Journal, xi, 102, Mr. Walter Mantell sent the skins of three birds of the genus *Apteryx*; one of them is the small and rare species figured and described in the Zoological Transactions of London, by Mr. Gould, as *A. Owenii*. The other skins were supposed to be of the common species, generally known as the *Apteryx australis*; of which some thirty or forty specimens have been sent to Europe, and are distributed in the public and private zoological collections of England and the continent. One of Mr. Mantell's specimens was remarkable for its large size, and short and strong legs; but though seen by many eminent ornithologists in London, it was regarded only as a very large and fine example of the common species, till Mr. Bartlett, the eminent taxidermist, in whose hands it was placed by Dr. Mantell to stuff and mount, compared it with the various specimens in the British museum, and in the collections of the Zoological Society, and ascertained that it was specifically distinct from that usually named the *Apteryx australis*. Mr. Bartlett therefore drew up a description of this bird to lay before the Zoological Society: but fortunately first applied to the Earl of Derby for the loan of the original specimen figured and described by Dr. Shaw, in 1812, and which at the death of that naturalist passed into Lord Derby's possession. Upon receiving this bird, Mr. Bartlett found that it was identical with the supposed new species sent home by Mr. Walter Mantell; the latter therefore is the true *Apteryx australis* of Dr. Shaw, and only the second example known in Eng-

\* Crust. Faun. Japon. 73.

† Jukes's Voy. H. M. S. Fly; Ann. Mag. N. H. [2], i, 331; Crust. Voy. Erebus and Terror, pl. 2, fig. 1.

‡ Crust. Voy. of Samarang, p. 23.